



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

Department of
Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

December 16, 2008

Mr. Dave Shaver
Andalex Resources, Inc.
P.O. Box 910
East Carbon, UT 84520-0910

Subject: Inspection Report – UPDES Permit Nos. UT0025674 – Tower Facility.

Dear Mr. Shaver:

On December 9, 2008 I met with your authorized agent, Ms. Karla Knoop and conducted a Compliance Evaluation Inspection in regards to your UPDES Permit facility referenced above. Specifically we discussed the facility status while touring the outfalls, sedimentation ponds and receiving waterways. No deficiencies were noted during the inspection and no written response is required at this time.

Enclosed is a copy of the inspection report for your records. I appreciate your efforts to facilitate the inspection and keep me informed of the operations. If you have any questions, please contact me at (801) 538-6779 or by e-mail at jstudenka@utah.gov.

Sincerely,

Jeff Studenka, Environmental Scientist
UPDES IES Section

Enclosures

cc (w/encl): Darcy O'Connor, EPA Region VIII
Claron Bjork, SE District Health Department
Dave Ariotti, SE District Engineer
Daron Haddock, Division of Oil Gas & Mines

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DIV. OF OIL, GAS & MINING



United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., ICIS)

Transaction Code N	NPDES U T 0 0 2 5 6 7 4	yr/mo/day 0 8 1 2 0 9	Inspection Type C	Inspector S	Fac. Type 2
1	2	3	11	12	17
Remarks					
21					
Inspection Work Days 2	Facility Self-Monitoring Evaluation Rating 5	BI N	QA N	Reserved	
67	69	70	71	72	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) ANDALEX Centennial Mines Project ~8 miles NE of Price, UT 6750 North Airport Road Price, UT 84501	Entry Time/ Date 9:25 am/12-9-2008	Permit Effective Date 12-1-2006
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Karla Knoop, Hydrologist & Authorized Agent jbr Environmental Consultants, Inc. phone (435) 637-9645 fax (435) 637-8679	Exit Time/ Date 10:15 am/12-9-2008	Permit Expiration Date 11-30-2011
Name, Address of Responsible Official/Title/Phone and Fax Number Bruce Hill, President David Shaver, Resident Agent P.O. Box 910 East Carbon, UT 84520 (435) 888-4017	Other Facility Data (e.g., SIC NAICS, and other descriptive information) Bituminous Coal Underground Mining Facility SIC Code 1222 NAICS 212112 SEE ATTACHED	
Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Self Monitoring Program	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedule	<input type="checkbox"/> Pollution Prevention	
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	
<input checked="" type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input checked="" type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Name(s) and Signature(s) of Inspector(s) JEFF STUDENKA, ENVIRONMENTAL SCIENTIST 	Agency/Office/Phone and Fax Number(s) DWQ (801) 538-6779	Date: 12-16-08
Name and Signature of Management Q A Reviewer MIKE HERKIMER, MANAGER UPDES IES SECTION 	Agency/Office/Phone and Fax Number(s) DWQ (801) 538-6058	Date: 12/18/08

INSTRUCTIONS

Section A: National Data System Coding (i.e., ICIS)

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc. (Use the Remarks columns to record the State permit number, if necessary.)

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A Performance Audit	X Toxics Inspection	6 IU Non-Sampling Inspection with Pretreatment
B Compliance Biomonitoring	Z Sludge - Biosolids	7 IU Toxics with Pretreatment
C Compliance Evaluation (non-sampling)	# Combined Sewer Overflow-Sampling	! Pretreatment Compliance (Oversight)@ Follow-up (enforcement)
D Diagnostic	\$ Combined Sewer Overflow-Non-Sampling	{ Storm Water-Construction-Sampling
F Pretreatment (Follow-up)	+ Sanitary Sewer Overflow-Sampling	} Storm Water-Construction-Non-Sampling
G Pretreatment (Audit)	& Sanitary Sewer Overflow-Non-Sampling	: Storm Water-Non-Construction-Sampling
I Industrial User (IU) Inspection	\ CAFO-Sampling	~ Storm Water-Non-Construction-Non-Sampling
J Complaints	= CAFO-Non-Sampling	< Storm Water-MS4-Sampling
M Multimedia	2 IU Sampling Inspection	- Storm Water-MS4-Non-Sampling
N Spill	3 IU Non-Sampling Inspection	> Storm Water-MS4-Audit
O Compliance Evaluation (Oversight)	4 IU Toxics Inspection	
P Pretreatment Compliance Inspection	5 IU Sampling Inspection with Pretreatment	
R Reconnaissance		
S Compliance Sampling		
U IU Inspection with Pretreatment Audit		

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A- State (Contractor)	O- Other Inspectors, Federal/EPA (Specify in Remarks columns)
B- EPA (Contractor)	P- Other Inspectors, State (Specify in Remarks columns)
E- Corps of Engineers	R- EPA Regional Inspector
J- Joint EPA/State Inspectors—EPA Lead	S- State Inspector
L- Local Health Department (State)	T- Joint State/EPA Inspectors—State lead
N- NEIC Inspectors	

Column 20: Facility Type. Use one of the codes below to describe the facility.

- 1- Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2- Industrial. Other than municipal, agricultural, and Federal facilities.
- 3- Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
- 4- Federal. Facilities identified as Federal by the EPA Regional Office.
- 5- Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as follow-up on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

INSPECTION PROTOCOL

UPDES Permit #: UT0025674 - Andalex Tower Mine
Inspection Type: Compliance Evaluation Inspection
Inspection Date: December 9, 2008

Jeff Studenka of the Division of Water Quality (DWQ) met with Karla Knoop at the ANDALEX Resources, Inc., Centennial Mines Project Tower Facility. The purpose for the site visit was to perform an inspection to verify the inactive status of the facility since the mine water discharge had ceased in early September 2008. The U.S. EPA R8 NPDES Inspection Checklist was completed along with a facility tour.

FACILITY DESCRIPTION

Location: Approximately 8 miles NE of Price, Utah on Airport Road.
Coordinates: Outfall 001 (sed. pond) – 39° 43' 37" latitude, -110° 43' 18" longitude
Outfall 002 (mine water) – 39° 43' 49" latitude, -110° 43' 18" longitude
Outfall 003 (sed. pond) – 39° 43' 25" latitude, -110° 43' 18" longitude
Outfall 004 (mine water) – 39° 42' 10" latitude, -110° 44' 20" longitude

Average Flow: ~1.0 MGD from outfall 004(Thru Sept. 2008, no discharges since or from 001, 002, 003)

Receiving waters: Deadman Canyon ephemeral drainage → Hayes Wash → Price River.

Process: Until earlier in the year, this was an active underground coal mining operation utilizing long-wall technology. Water from the mine was conveyed to below ground settling areas and pump stations, where it was then piped out of the mine from three pump stations and discharged to Deadman Canyon drainage (Outfall 004). Since September 2008, the mine water pumps have been shut off and removed, and there has been no discharge and none is expected into the foreseeable future. Surface water runoff is conveyed to two above ground settling ponds (001 & 003) that have not discharged to date and are not expected to discharge in the foreseeable future. Outfall 002 has not discharge in many years and it is not expected to discharge in the foreseeable future since the mine is inactive and shut down. The mine portals have been sealed and the facility remains inactive and closed.

INSPECTION SUMMARY

There were no deficiencies noted during the last inspection for follow up, however there have been several iron exceedences in the mine water discharge in recent months as equipment and supplies were removed from the mine prior to shut down. A 2008 DMR file review was conducted and summarized on the attached table. Flows and pH are measured on site. Prior to shut down, effluent monitoring samples were sent to Horizon Labs in nearby Huntington for TSS, TDS, total iron, and oil & grease testing. Information provided on the DMR was consistent with the data reported on the laboratory bench sheets. Holding times were met and the appropriate numbers of samples were collected using the methods specified in the permit. Prior to shut down, flow was measured by in-line flow thru meters with totalizers, but has since been removed. Instantaneous pH was recorded, along with temperature and conductivity, by JBR Environmental Consultants as appropriate. The outfall locations and sedimentation ponds were observed as well as the receiving water drainage of Deadman Canyon, which was dry at the time of the inspection. Several photos were collected for the file and are included with a

photo log as an attachment herein. There were no deficiencies observed, however the facility is currently in the process of formally resolving the prior total iron effluent limitation violations through a Settlement Agreement, which was the result of the Notice of Violation issued on September 29, 2008. Resolution is being accomplished through the DWQ enforcement process under separate correspondences. No further action is necessary as the facility is shut down and no observable ill-effects have been reported down stream from the previous excessive iron discharges.

DEFICIENCIES

None.

REQUIREMENTS

None.

RECOMMENDATIONS

Continue working with DWQ to formally resolve the enforcement proceedings.

[illegible]

ANDALEX Centennial UT0025674	PO Box 902 Airport Rd. Price, UT 84501	Bruce Hill, Karla Knoop 435-888-4015	J	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Outfall 003			A	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			M	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			J	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			J	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			A	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
New Permit 12-1-06.			S	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			O	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			N	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			D			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ANDALEX Centennial Outfall 004	PO Box 902 Airport Rd.	Bruce Hill, Karla Knoop	J	Y	0	1.1	8.4	<4	n/a	0.651	1615 / 6.9*	<5	ND	ND	ND	ND
			F	Y	0	1.0	8.6	<5		0.71	1633 / 6.6*	<5	ND	ND	ND	ND
			M	Y	0	0.5	8.5	4		0.508	1502 / 3.4*	<5	ND	ND	ND	ND
			A	Y	0	0.82	8.47	4		0.658	2252 / 6.5*	<5	ND	ND	ND	ND
			M	Y	1	0.94	7.35	15		6.561	1980 / 8.6*	<5	ND	ND	ND	ND
Salinity-Offset Plan approved 12-1-2006			J	Y	1	0.95	8.2	9		2.555	1694 / 6.6	<5	ND	ND	ND	ND
			J	Y	1	1.02	7.32	<4		1.316	1621 / 6.6*	<5	ND	ND	ND	ND
			A	Y	0	1.2	7.9	5		1.0	1505 / 7.5*	<5	ND	ND	ND	ND
New Permit 12-1-06.			S	Y	1	1.2	8.02	5		3.279	1484 / 7.4*	<5	ND	ND	ND	ND
		Mine pumps shut down 9-11-08	O	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			N	Y	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			D			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Discharge

n/a = not applicable

Permit exceedences in **BOLD**

*Participating in salinity-offset projects to account for TDS loading > 1-ton/day

USEPA REGION 8 NPDES INSPECTION CHECKLIST

NPDES PERMIT #: VT 0025674INSPECTION DATE: 12-9-08FACILITY: Andalex Resources, Inc.
Tower Mine - Karna KnoopON SITE: 0925
OFF SITE: 1015
J. Studentka - DWQ

I. PERMIT VERIFICATION

☒ YES ☐ NO

Inspection observations verify information contained in permit.

☒ Yes ☐ No ☐ N/A1. Current copy of permit on site. (at Westridge offices)☒ Yes ☐ No ☐ N/A2. Name, mailing address, contact, and phone number are correct in PCS. If not, indicate correct information on Form 3560. Updated OCT 2008

3. Brief description of the wastewater treatment plant:

NO - No Discharge since Sept. 2008 - Facility shut down and inactive.
Prior to Sept. 2008, Mine water was collected underground in settling +
then pumped out from two separate areas to out fall 004☒ Yes ☐ No ☐ N/A

4. Facility is as described in permit. If not, what is different? _____

☐ Yes ☐ No ☒ N/A

5. EPA/State has been notified of any new, different, or increased loading to the WWTP.

☒ Yes ☐ No ☐ N/A6. Number and location of discharge points are as described in the permit. Four (001 → 004)☒ Yes ☐ No ☐ N/A7. Name of receiving water(s) is/are correct. Deadman Canyon → Hays Wash → Five River

Comments:

II. RECORDKEEPING AND REPORTING EVALUATION

☒ YES ☐ NO

Records and reports are maintained as required by permit.

☒ Yes ☐ No ☐ N/A

1. All required information is current, complete, and reasonably available.

☒ Yes ☐ No ☐ N/A

2. Information is maintained for the required 3 year period.

3. Sampling and analysis data are adequate and include:☒ Yes ☐ No ☐ N/A

a. Dates, times, locations of sampling.

☒ Yes ☐ No ☐ N/A

b. Initials of individual performing sampling.

☒ Yes ☐ No ☐ N/A

c. Referenced analytical methods and techniques in conformance with 40 CFR Part 136.

☒ Yes ☐ No ☐ N/A

d. Results of analyses and calibration.

☒ Yes ☐ No ☐ N/A

e. Dates of analyses (and times if required by permit).

☒ Yes ☐ No ☐ N/A

f. Initials of person performing analyses.

☒ Yes ☐ No ☐ N/A

g. Instantaneous flow at grab sample stations.

- ☒ Yes ☐ No ☐ N/A 4. Sampling and analysis completed on parameters specified in permit.
- ☒ Yes ☐ No ☐ N/A 5. Sampling and analysis done in frequency specified by permit.

Comments: AUG/Sept. 2008 DMRs audited

☒ YES ☐ NO DMR completion meets the self-monitoring reporting requirements.

- ☒ Yes ☐ No ☐ N/A 1. Monitoring for required parameters is performed more frequently than required by permit. Parameter(s) _____

- ☒ Yes ☐ No ☐ N/A 2. Analytical results are consistent with the data reported on the DMRs.

- ☒ Yes ☐ No ☐ N/A 3. All data collected are summarized on the DMR.

- ☒ Yes ☐ No ☒ N/A 4. Monthly, weekly, and/or daily average loading values are calculated properly and reported on the DMR. (Effluent loadings are calculated using effluent flow.)

- ☒ Yes ☐ No ☒ N/A 5. The geometric mean is calculated and recorded for fecal coliform data.

- ☒ Yes ☐ No ☐ N/A 6. Weekly and monthly averaging is calculated properly and reported on the DMR.

- ☒ Yes ☐ No ☐ N/A 7. The maximum and minimum values of all data points are reported properly.

- ☒ Yes ☐ No ☐ N/A 8. The number of exceedances column (No. Ex.) is completed properly.

Comments: AUGUST/SEPT. '08 DMRs audited

WHOLE EFFLUENT TOXICITY TESTING AND REPORTING N/A - NOT WET TESTING REQUIRE

☒ YES ☐ NO WET sampling by permittee adequate to meet the conditions of the permit.

- ☒ Yes ☐ No a. Chain of custody used.
- ☒ Yes ☐ No b. Method of shipment and preservation adequate (iced to 4°C).
- ☒ Yes ☐ No c. Type of sample collected _____ (as required by permit).
- ☒ Yes ☐ No d. Holding time met (received w/in 36 hours).

- ☒ Yes ☐ No ☐ N/A 2. Lab reports/chain of custody sheets indicate temperature of sample at receipt by lab.
- a. Indicate temperature _____

- ☒ Yes ☐ No ☐ N/A 3. Permittee has copy of the latest edition of testing methods or Region 8 protocol. (Latest version is July 1993 - Colorado has its own guidance.)

- ☒ Yes ☐ No ☐ N/A 4. Permittee reviews WET lab reports for adherence to test protocols.

- ☒ Yes ☐ No ☐ N/A 5. Lab has provided quality control data, i.e., reference toxicant control charts.

Yes No N/A
Yes No N/A
Yes No N/A

6. Permittee has asked lab for QC data.
7. Permittee maintains copies of WET lab reports on site for required 3 year period, and makes them available for review by inspectors.
8. Evaluation and review of WET data by permittee adequate such that no follow up at lab is necessary. (Follow up to be conducted by EPA and/or State.)

Comments:

No WET testing required

IV. FACILITY SITE REVIEW

YES NO

Treatment facility properly operated and maintained.

Yes No N/A

1. Standby power or other equivalent provision is provided. Specify type:

Facility shutdown

Yes No N/A

2. Facility has an alarm system for power or equipment failures. What kind of problems has the facility experienced due to power failures?

Yes No N/A

3. Treatment control procedures are established for emergencies.

Yes No N/A

4. Facility can be by-passed (internal, collection system, total). Describe by-pass procedures:

Yes No N/A

5. Regulatory agency was notified of any bypassing (treated and/or untreated).

Dates: _____

Yes No N/A

6. WWTP has adequate capacity to ensure against hydraulic and/or organic overloads.

Yes No N/A

7. All treatment units, other than back-up units, are in service. If not, what and why?

Sed ponds only

Yes No N/A

8. O&M manual available and up-to-date.

Yes No N/A

9. Procedures for plant O&M, including preventive maintenance schedules, are established and performed on time.

Yes No N/A

10. Adequate spare parts and supplies inventory (including flow meters) are maintained, as well as major equipment specifications and/or repair manuals.

Yes No N/A

11. Up-to-date maintenance and repair records are kept for major pieces of equipment.

- ala

14. What procedures or practices are used to train new operators? NA

YES NO

Facility shut down & inactive

- Yes No N/A 2. Personal protective clothing provided (safety helmets, ear protectors, goggles, gloves, rubber boots with steel toes, eye washes in labs).

- Yes No N/A
4. Plant has general safety structures such as rails around or covers over tanks, pits, or wells. Plant is enclosed by a fence.

- Yes No N/A 6. All electrical circuitry enclosed and identified.

- | | | | | |
|-----|----|-----|---|--------------------------------------|
| Yes | No | N/A | 7. Chlorine safety is adequate and includes: | <i>No chlorine treatment on site</i> |
| Yes | No | N/A | a. NIOSH-approved 30-minute air pack. | |
| Yes | No | N/A | b. All standing chlorine cylinders chained in place. | |
| Yes | No | N/A | c. All personnel trained in the use of chlorine. | |
| Yes | No | N/A | d. Chlorine repair kit. | |
| Yes | No | N/A | e. Chlorine leak detector tied into plant alarm system. | |
| Yes | No | N/A | f. Ventilation fan with an outside switch. | |
| Yes | No | N/A | g. Posted safety precautions. | |

- Yes ☒ No ☒ N/A ☐ 8. Warning signs (no smoking, high voltage, nonpotable water, chlorine hazard, watch-your-step, and exit) posted.

- Yes No N/A 9. Gas/explosion controls such as pressure-vacuum relief valves, no smoking signs, explosimeters, and drip traps present near anaerobic digesters, enclosed screening or degritting chambers, and sludge-piping or gas-piping structures.

- res) No N/A 10. Emergency phone numbers listed.

- ☒ Yes No N/A 11. Plant is generally clean, free from open trash areas.
- ☒ Yes No N/A 12. MSDS sheets, if required, are accessible by employees.

At WestRidge

Comments:

VI. FLOW MEASUREMENT

☒ YES NO FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF PERMIT

A. PRIMARY EFFLUENT FLOW MEASUREMENT

1. General

Type of primary flow measurement device: in line meters underground previously (removed upon shutdown)

- ☒ Yes No ☒ N/A 1. Primary flow measuring device is properly installed and maintained.
Where? Recently removed from underground workings
- ☒ Yes No N/A 2. Flow measured at each outfall. Number of outfalls: 4
3. Frequency of routine inspection of primary flow device by operator:
 /day. n/a
4. Frequency of routine cleaning of primary flow device by operator:
 /week. n/a
- ☒ Yes No ☒ N/A 5. Influent flow is measured before all return lines.
- ☒ Yes No N/A 6. Effluent flow is measured after all return lines.
- ☒ Yes No ☒ N/A 7. Proper flow tables are used by facility personnel.
8. Design flow: mgd.
- ☒ Yes No N/A 9. Flow measurement equipment adequate to handle expected ranges of flow rate.

2. Open Channel Primary Flow Measuring Devices

Flumes

Type and size: n/a EFF

- ☒ Yes No ☒ N/A 1. Flume is located in a straight section of the open channel, without bends immediately upstream or downstream.
- ☒ Yes No N/A 2. Flow entering flume appears reasonably well distributed across the channel and free of turbulence, boils, or other distortions.
- ☒ Yes No N/A 3. Flume is clean and free of obstructions, debris or deposits.
- ☒ Yes No N/A 4. All dimensions of flume accurate and level.

- Yes No N/A 5. Sides of flume throat are vertical and parallel.
- Yes No N/A 6. Side walls of flume are vertical and smooth.
- Yes No N/A 7. Flume head is being measured at proper location. (Location dependent on flume type - see NPDES Compliance Inspection Manual or ISCO book.)
- Yes No N/A 8. Flume is under free flow conditions at all times. (Flume is not submerged.)

Weirs

Type: N/A EFF

- Yes No N/A 1. Weir is level.
- Yes No N/A 2. Weir plate is plumb and its top edges are sharp and clean.
- Yes No N/A 3. Downstream edge of weir is chamfered at 45°.
- Yes No N/A 4. There is free access for air below the nappe of the weir.
- Yes No N/A 5. Upstream channel of weir is straight for at least four times the depth of water level, and free from disturbing influences.
- Yes No N/A 6. Distance from sides of weir to side of channel at least 2H.
- Yes No N/A 7. Area of approach channel at least 8 x nappe area for upstream distance of 15H. (If not, is velocity of approach too high?)
- Yes No N/A 8. Weir is under free-flow conditions at all times. (Weir is not submerged.)
- Yes No N/A 9. The stilling basin of the weir is of sufficient size and clear of debris.
- Yes No N/A 10. Head measurements are properly made by facility personnel.
- Yes No N/A 11. Weir is free from leakage.

3. Closed Channel Primary Measuring Devices

Electromagnetic Meters

— Inactive facility, equipment removed

Type and model: N/A EFF

- Yes No N/A 1. There is a straight length of pipe or channel before and after the flowmeter of at least 5 to 20 diameters.
- Yes No N/A 2. There are no sources of electric noise in the near vicinity.
- Yes No N/A 3. Magnetic flowmeter is properly grounded.
- Yes No N/A 4. Full pipe requirement is met.

Venturi Meters

Type and model: N/A EFF

Yes No N/A

1. Venturi meter is installed downstream from a straight and uniform section of pipe?

B. Secondary Flow Measurement

1. General

1. What are the most common problems that the operator has had with the secondary flow measurement device? n/a primary only

Yes No N/A

2. Flow records properly kept.

Yes No N/A

a. All charts maintained in a file.

Yes No N/A

b. All calibration data kept.

Yes No N/A

3. Secondary device calibration records are kept.

a. Frequency of secondary device calibration: ____ / year.

4. Frequency of flow totalizer calibration: ____ / year.

Yes No N/A

5. Secondary instruments (totalizers, recorders, etc.) are properly operated, calibrated, and maintained.

Floats

Type and model: n/a EFF

Bubblers

Type and model: n/a EFF

Ultrasonic

Type and model: n/a EFF

Electrical

Type and model: n/a EFF

Comments:

Facility inactive + shutdown, equipment removed, portals sealed, no further mining or discharge anticipated.

2. Flow Verification

Accuracy of Flow Measurement
(Secondary against Primary)

n/a

	Type and size of primary device
	EFF:
Reading from primary standard, feet and inches	
Equivalent to actual flow, mgd	
Facility-recorded flow from secondary device, mgd	
Percent Error	
Correction Factor	

Fill in above only if the primary device has been correctly installed, or if correction factor is known.

Comments: No Flow, Discharged ceased for good in Sept-2008

VII. LABORATORY QUALITY ASSURANCE

☒ YES NO

Laboratory procedures meet the requirements and intent of the permit.

☒ Yes No N/A

1. Commercial laboratory is used.

Pre Sept. 2008

Parameters	TSS, TDS, O ₂ , Fe, Mn
Name	Horizon Labs, Inc
Address	Huntington
Contact	Brandon Pearce
Phone	435-637-8855

☒ Yes No N/A

2. According to the permittee, commercial laboratory is State certified (ND & UT only).

☒ Yes No N/A

3. Written laboratory quality assurance manual is available, if the facility does its own lab work. pH & conductivity & temp in field

☒ Yes No N/A

4. Quality control procedures are used. Specify: _____

☒ Yes No N/A

5. Calibration and maintenance of laboratory instruments and equipment is satisfactory.

☒ Yes No N/A

6. Samples are analyzed in accordance with 40 CFR 136.

☒ Yes No N/A

7. Results of last DMR/QA test available. Date: _____

☒ Yes No N/A

8. Facility lab does analyses for other permittees. If yes, list the facilities and their permit numbers.

VIII. COMPLIANCE SCHEDULE STATUS REVIEW

n/a - no compliance schedule

YES NO

The permittee is meeting the compliance schedule

1. Is the facility subject to a compliance schedule either in its permit or in an order? If facility is subject to an order, note docket number: I08-08

N/A

2. What milestones remain in the schedule? _____

(Attach additional sheets as necessary.)

Yes No *N/A*

3. Facility is in compliance with unachieved milestones.

Yes No *N/A*

4. Facility has missed milestone dates, but will still meet the final compliance date.

IX. PERMITTEE SAMPLING EVALUATION

Pre Sept. 2008

☒ YES ☐ NO

Sampling meets the requirements and intent of the permit.

☒ Yes ☐ No *N/A*

1. Samples are taken at sampling location specified by permit.

☒ Yes ☐ No *N/A*

2. Locations are adequate for representative samples.

Yes No ☒ *N/A*

3. Flow proportioned samples are obtained.

☒ Yes ☐ No *N/A*

4. Permittee is using method of sample collection required by permit.

Required method: grab

If not, method being used is:

() Grab

() Manual

() Automatic composite

☒ Yes ☐ No *N/A*

5. Sample collection procedures adequate and include:

a. Sample refrigeration during compositing.

b. Proper preservation techniques.

c. Containers in conformance with 40 CFR 136.3.

Specify any problems: _____

Comments:

*No problems identified
- photos collected for file
- verified no discharge status, inactive facility.*

PHOTO LOG

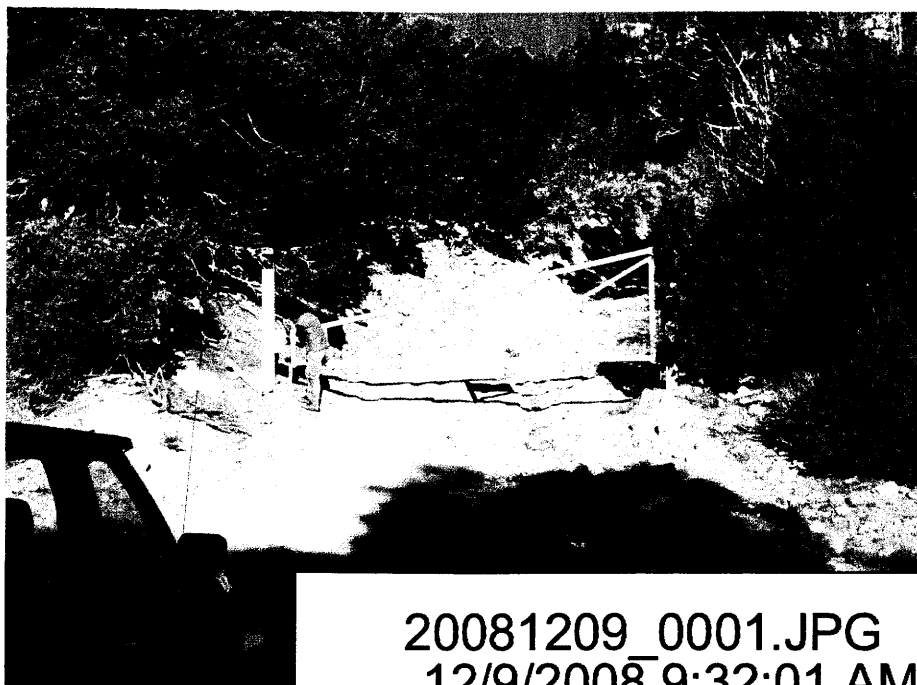
Andalex Resources Tower Mine (UT0025674)

12-9-2008

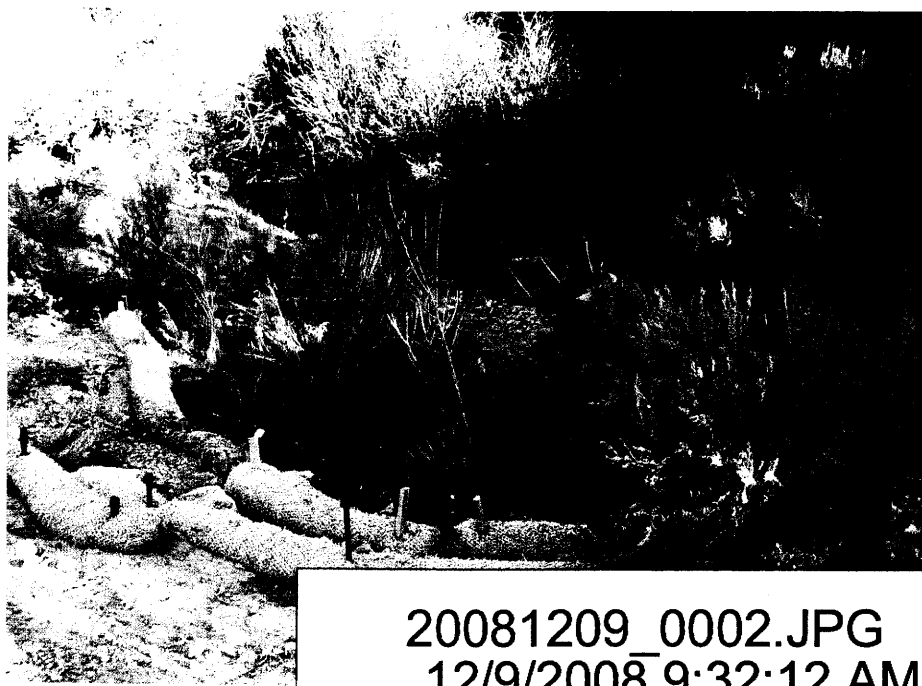
- Photo #1: View of access gate to Outfall 004, facing north.
- Photo #2: Deadman Canyon wash (dry) from access gate, looking downstream.
- Photo #3: Looking down on Outfall 004 piping exposed.
- Photo #4: View of rocks just below Outfall 004.
- Photo #5: Looking downstream from Outfall 004.
- Photo #6: View of facility main gate, facing northeast.
- Photo #7: View of runoff pond series above Outfalls 001 & 003, facing southwest.
- Photo #8: View of sedimentation pond (dry) and outfall 003, facing southwest.
- Photo #9: View of final sedimentation pond and Outfall 001, facing west.

END (Photos taken by J. Studenka)

Andalex Tower Mine CEI



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Andalex Tower Mine CEI

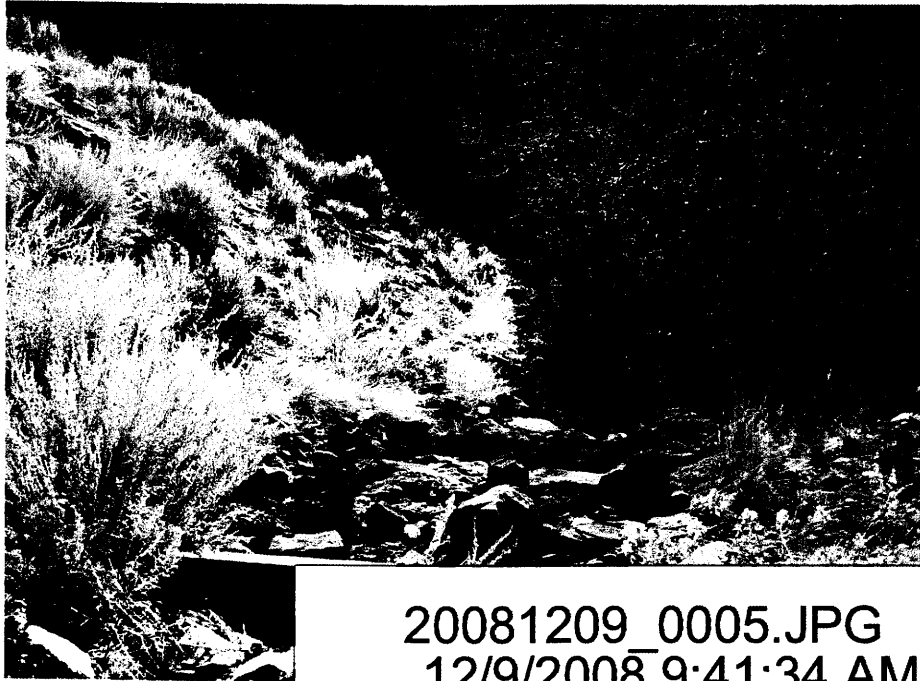


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Andalex Tower Mine CEI

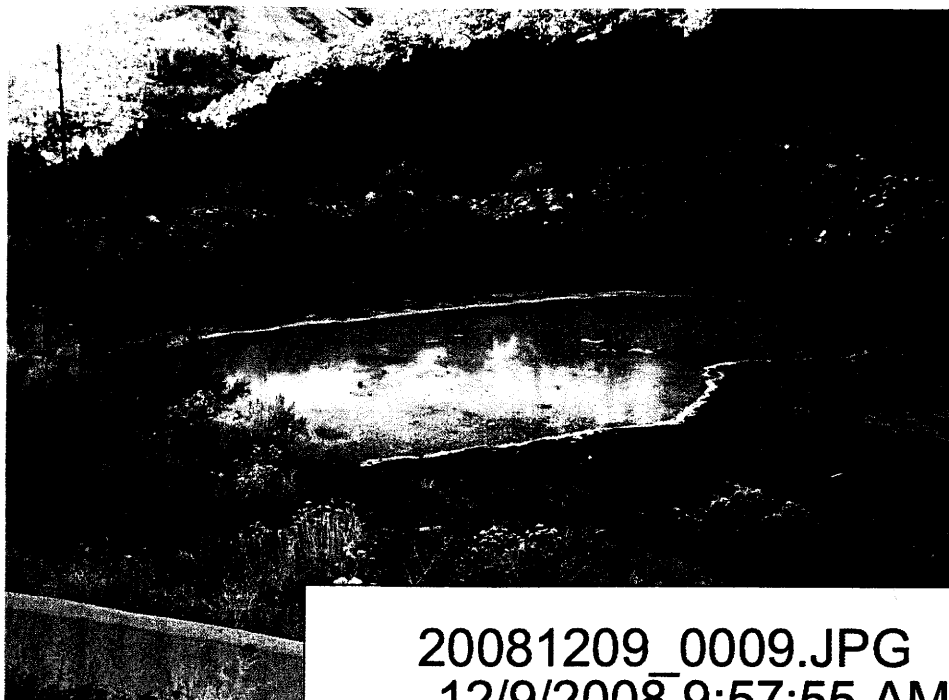


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Andalex Tower Mine CEI



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